

• IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

1. (Currently Amended) An image coder which quantizes a predetermined number of orthogonal transformation factors, comprising:

 a first scan converter, adapted to rearrange the orthogonal transformation factors in a first scan sequence which is different from a zigzag scan sequence and output the predetermined number of the rearranged orthogonal transformation factors at a time; and

 a second scan converter, adapted to rearrange quantized orthogonal transformation factors in the zigzag scan sequence and output the rearranged quantized orthogonal transformation factors,

wherein the first scan sequence is a sequence in which
odd-numbered samples are arranged in a forward direction from a start of the zigzag scan
sequence, and even-numbered samples are arranged in a reverse direction from an end of
the zigzag scan sequence, in a scanning order of 8 x 8 DCT coefficients of 1 through 64.

2. - 22. (Canceled)

23. (Currently Amended) An image coding method of quantizing a predetermined number of orthogonal transformation factors, comprising:

a first scan conversion step, of rearranging the orthogonal transformation factors in a first scan sequence which is different from a zigzag scan sequence and outputting the predetermined number of the rearranged orthogonal transformation factors at a time; and

a second scan conversion step, of rearranging quantized orthogonal transformation factors in the zigzag scan sequence and outputting the rearranged quantized orthogonal transformation factors,

wherein the first scan sequence is a sequence in which odd-numbered samples are arranged in a forward direction from a start of the zigzag scan sequence, and even-numbered samples are arranged in a reverse direction from an end of the zigzag scan sequence, in a scanning order of 8 x 8 DCT coefficients of 1 through 64.

24. (Canceled)

25. (Currently Amended) A computer readable storage medium storing an image coding program for causing a computer to quantize a predetermined number of orthogonal transformation factors, comprising:

code for a first scan conversion step, of rearranging the orthogonal transformation factors in a first scan sequence which is different from a zigzag scan sequence and outputting the predetermined number of the rearranged orthogonal transformation factors at a time; and

code for a second scan conversion step, of rearranging quantized orthogonal transformation factors in the zigzag scan sequence and outputting the rearranged quantized orthogonal transformation factors,

wherein the first scan sequence is a sequence in which odd-numbered samples are arranged in a forward direction from a start of the zigzag scan sequence, and even-numbered samples are arranged in a reverse direction from an end of the zigzag scan sequence, in a scanning order of 8 x 8 DCT coefficients of 1 through 64.

26. (Canceled)